Wenyue Zou

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Google Scholar and ResearchGate: Wenyue Zou

Institute of Earth Science Dynamics,

Faculty of Geosciences and Environment, University of Lausanne

RESEARCH INTERESTS

- Climatic and hydrologic extremes
- Stochastic and dynamic modelling of extreme rainfall
- Flood risk assessment in urban and catchment
- Climate change impact

PROFESSIONAL SKILLS

- Proficient in **extreme rainfall frequency analysis** and **storm stochastic modelling**
- Proficient in **geostatistical downscaling and interpolation**
- Proficient in MATLAB and ArcGIS for mapping and data analysis
- Skillful in modelling by Python and R

EDUCATION BACKGROUND

- **2021 - present** — **Ph.D. in Environmental Science,** Faculty of Geosciences and Environment, University of Lausanne

  Thesis: ***Future changes in rainfall properties and their effect on urban flooding.***
  Supervisor: Prof. Nadav Peleg

- **2018 - 2021** — **M.sc in Physical Geography,** Faculty of Geographic Science, Beijing Normal University — GPA:3.75/4 (10%)

  Thesis： ***Spatiotemporal characteristics of rainfall events based on a highly dense rain-gauge network.***
  Supervisor: Prof. Shuiqing Yin

- **2014 - 2018** — **B.sc in Geography,** Faculty of Geographical Science, Northwest Normal University — GPA:3.84/4 (1%)

  Thesis： ***Spatial and temporal variation characteristics of hourly precipitation during the Warm season 1961-2012 in the Haihe River basin.***
  Supervisor: Prof. Junju Zhou

PUBLICATIONS

- **Zou, W.,** et al., in preparation. Morphing sub-daily rainfall fields based on temperature shifts to assess changes in rainfall extremes.
- **Zou, W.,** et al., 2024. Multiple-point geostatistics-based spatial downscaling of heavy rainfall fields. Journal of Hydrology. https://doi.org/10.1016/j.jhydrol.2024.130899
- **Zou, W.,** et al., 2021. Spatial interpolation of the extreme hourly precipitation at different return levels in the Haihe River basin. Journal of Hydrology. https://doi.org/10.1016/j.jhydrol.2021.126273
- Li, Q., Zhou, J., **Zou, W**., et al., 2020. A tributary-comparison method to quantify the human influence on hydrological drought. Journal of Hydrology. https://doi.org/10.1016/j.jhydrol.2020.125652

SERVICES

2024	**PhD committee - Expertise Center for Climate Change, University of Lausanne** *Assist in organizing the center seminars and "weather club"*
2024	**Reviewer, Earth Surface Processes and Landforms**
2022	**Teaching assistant,** Faculty of Geosciences and Environment, University of Lausanne • Watershed and river network modelling (Master course)
2020	**Teaching assistant,** Faculty of Geographical Science, Beijing Normal University • Meteorology measurement fieldwork (Bachelor) • Assessment of climate change and its impacts (Master)
2023	**Student committee – CLIMACT, University of Lausanne and EPFL**
2021	Student committee in Association du Corps Intermédiare, FGSE, UNIL

AWARDS AND SCHOLARSHIPS

- 2021 Excellent Master Thesis in Beijing Normal University
- 2018, 2019 Academic Scholarship in Beijing Normal University (first class, twice)
- 2017 First prize in Scientific Research Challenge Cup at Northwest Normal University (5%)
- 2016 First prize in National College Students Mathematic Modeling Competition (10%)
- 2015 National Endeavor Scholarship (10%)